Lanzar® MAX PRO ST

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Lanzar® MAX PRO ST



MXA 232
MXA 242
MXA 252
MXA 282
MXA 412
MXA 422

AMERICAN CRAFTED PERFORMANCE

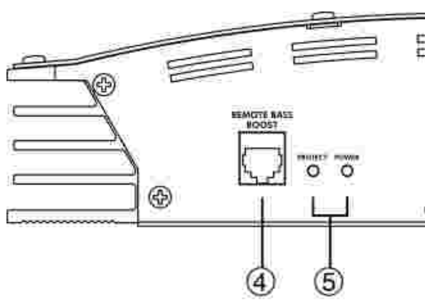
Owner's Manual

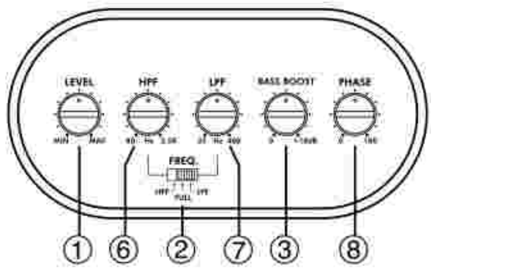
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Congratulations on your purchase of a Lanzar MAX PRO amplifier. You have purchased a quality product designed and engineered to give you many years of uncompromised musical service. MAX PRO amplifiers are designed with the latest technology available, which provides headroom for even the most demanding peaks and dynamic ranges found on modern CD's and recordings.

TABLE OF CONTENTS

MXA 232/242/252/282





1. INPUT LEVEL CONTROLS

Enables the matching of input levels to the output levels from head unit (or other signal source).

2. CROSSOVER MODE SELECTOR

Determines the mode of built-in crossover:
low pass (permits only low frequency signals to pass to speakers),
high pass (permits only high frequency signals to pass to speakers),
or flat.

3. BASS BOOST CONTROL

With a bass boost switch engaged, the bass level is increased approx 18dB.

4. REMOTE BASS BOOST

Plug in the remote bass boost control wire in here

5. POWER & PROTECTION INDICATORS

Provide instant information on status of amplifier, including short-circuit and thermal overload alerts.

6. HIGH PASS FILTER (HPF)

When Crossover Mode Selector is in High Pass Mode, this control limits the frequencies which will be distributed to the speakers to those below the value to which this is set within the range 80-2.5KHz.

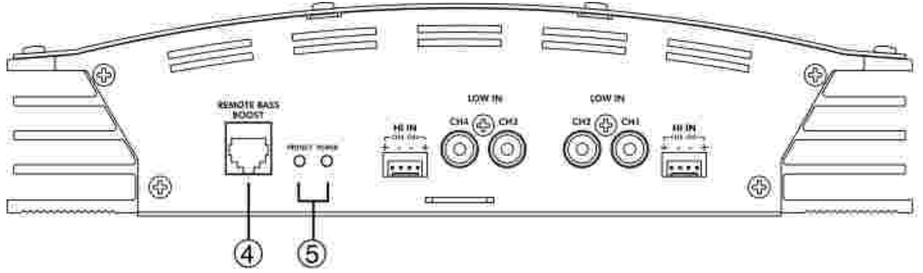
7. LOW PASS FILTER (LPF)

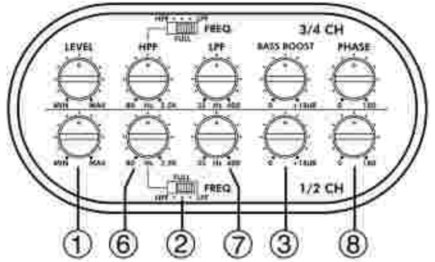
When Crossover Mode Selector is in Low Pass Mode, this control limits the frequencies which will be distributed to the speakers to those below the value to which this is set within the range 35-400Hz.

8. PHASE SHIFT CONTROL 0-180

Allows you to change the phase of your high and low crossover from 0 to 180 degrees to help compensate for timing difference between drivers.

MXA 412/422





1. INPUT LEVEL CONTROLS

Enables the matching of input levels to the output levels from head unit (or other signal source).

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When Crossover Mode Selector is in Low Pass Mode, this control limits the frequencies which will be distributed to the speakers to those below the value to which this is set within the range 35-400Hz.

8. PHASE SHIFT CONTROL 0-180

Allows you to change the phase of your high and low crossover from 0 to 180 degrees to help compensate for timing difference between drivers.

1. Find a suitable location in the vehicle to mount the amplifier.

2. Make sure there is sufficient air flow around the intended mounting location.

3. Bolt the amplifier to the mounting surface.

4. Connect the power ground terminal to the nearest point on the chassis of the car. Keep this ground wire less than one meter (39") in length. Use 8 gauge wire.

5. Connect the remote terminal to the remote output of the head unit using 14 gauge wire.

6. Connect an empty fuse holder within 300mm (12") of the battery and run 8 gauge of larger high quality cable from this fuse to the amplifier location.

7. Make sure there is no fuse in this fuse holder. Then make the connection to the "BATT" connection on the amplifier.

8. If multiple amplifiers are being used, use cables (each with its own fuse at the battery) or a #0 or #2 cable from the fuse holder at the battery to a distribution block at or near the amplifier's location.

9. Connect all line inputs and outputs using high-quality RCA-RCA cables.

10. Insert fuse(s) at the battery fuse holder(s).

11. Recheck all connections before powering up.

12. Set all level controls to their least sensitive positions and set all crossover controls, switches, etc. to the desired frequency or position.

13. Once the system is powered up, set the volume control on the head unit to about the 2 o'clock position, and then set all the amplifiers' level controls for maximum output level.

14. Further fine tuning of the various controls may be necessary to obtain the desired results.

MODEL	MXA 232 2 channel amplifier	MXA 242 2 channel amplifier	MXA 252 2 channel amplifier
RMS at 4 Ohms	2 x 75W	2 x 125W	2 x 200W
MAX at 4 Ohms	2 x 500W	2 x 800W	2 x 1200W
At 4 Ohms Bridged	1 x 1000W	1 x 1600W	1 x 2400W
RMS at 2 Ohms	2 x 100W	2 x 200W	2 x 300W
Min. Speaker Impedance	2 ohm	2 ohm	2 ohm
T.H.D.	0.04%	0.04%	0.04%
Frequency Response	15Hz-35KHz, -1dB	15Hz-35KHz, -1dB	15Hz-35KHz, -1dB
Input Sensitivity	250mV-5000mV	250mV-5000mV	250mV-5000mV
Input Impedance	22 Kohm	22 Kohm	22 Kohm
S/N Ratio	>90dB	>90dB	>90dB
Channel Separation	>65dB	>65dB	>65dB
Crossover Filters Low Pass High Pass	35Hz-400Hz 80Hz-2.50KHz	35Hz-400Hz 80Hz-2.50KHz	35Hz-400Hz 80Hz-2.50KHz
Bass Boost	+18dB	+18dB	+18dB
Dimensions (WxHxL)	10.47"x2.46"x12"	10.47"x2.46"x15"	10.47"x2.46"x19"
Fuse(s)	20A	30A	25Ax2

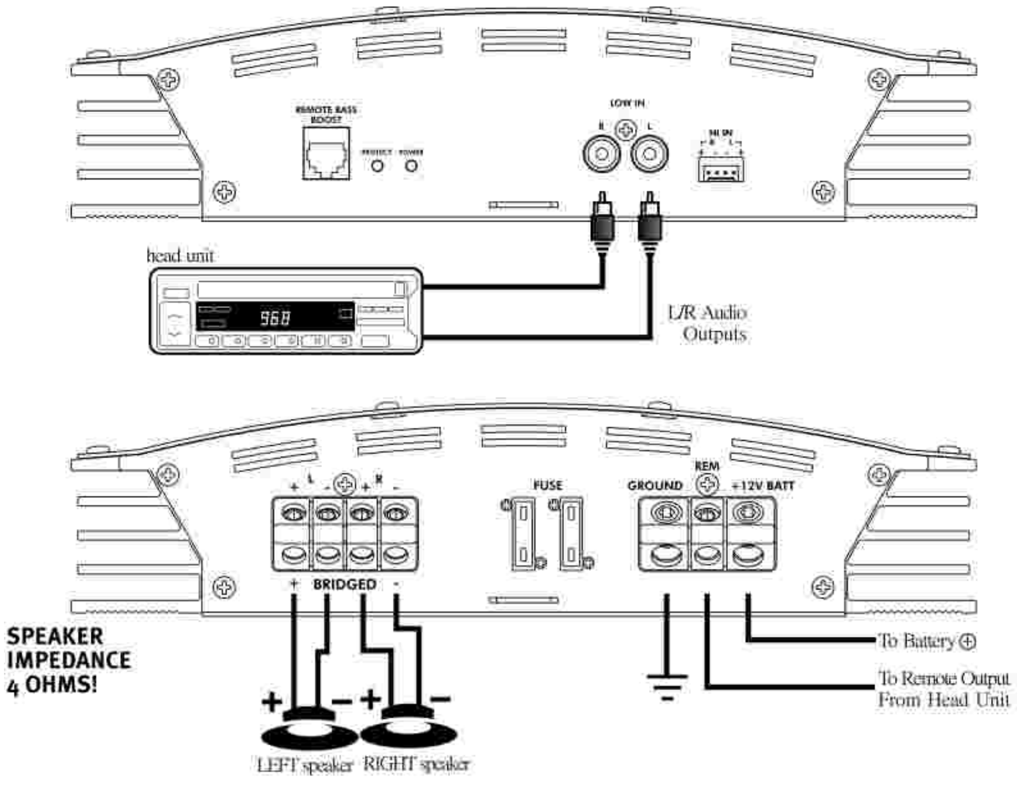
MODEL	MXA 282 2 channel amplifier	MXA 412 4 channel amplifier	MXA 422 4 channel amplifier
RMS at 4 Ohms	2 x 300W	4 x 35W	4 x 75W
MAX at 4 Ohms	2 x 2000W	4 x 250W	4 x 500W
At 4 Ohms Bridged	1 x 4000W	2 x 500W	2 x 1000W
RMS at 2 Ohms	2 x 450W	4 x 55W	4 x 120W
Min. Speaker Impedance	2 ohm	2 ohm	2 ohm
T.H.D.	0.04%	0.04%	0.04%
Frequency Response	15Hz-35KHz, -1dB	15Hz-35KHz, -1dB	15Hz-35KHz, -1dB
Input Sensitivity	250mV-5000mV	250mV-5000mV	250mV-5000mV
Input Impedance	22 Kohm	22 Kohm	22Kohm
S/N Ratio	>90dB	>90dB	>90dB
Channel Separation	>65dB	>65dB	>65dB
Crossover Filters Low Pass High Pass	35Hz-400Hz 80Hz-2.50KHz	35Hz-400Hz 80Hz-2.50KHz	35Hz-400Hz 80Hz-2.50KHz
Bass Boost	+18dB	+18dB	+18dB
Dimensions (WxHxL)	10.47"x2.46"x21"	10.47"x2.46"x12"	10.47"x2.46"x17"
Fuse(s)	35Ax2	20A	20Ax2

System Wiring
2 CHANNEL STEREO CONFIGURATION

MXA 232/242/252/282

FRONT

REAR

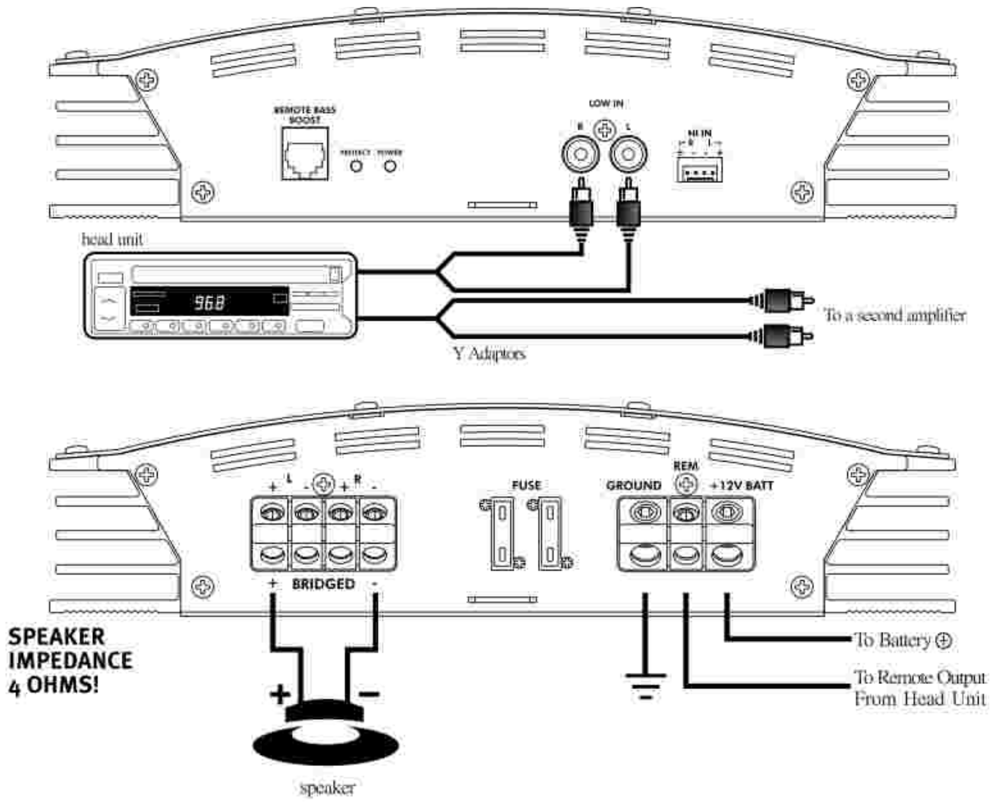


MXA 232/242/252/282

System Wiring
2 CHANNEL BRIDGED MODE CONFIGURATION

FRONT

REAR

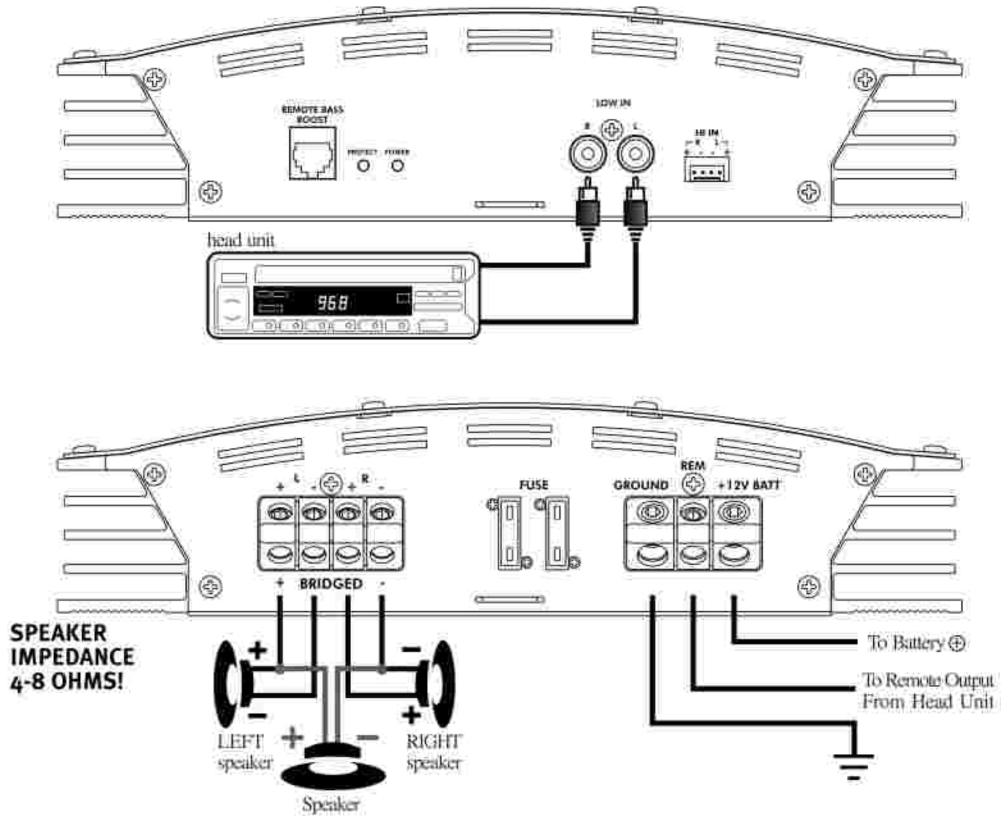


2 CHANNEL TRI-MODE CONFIGURATION

MXA 232/242/252/282

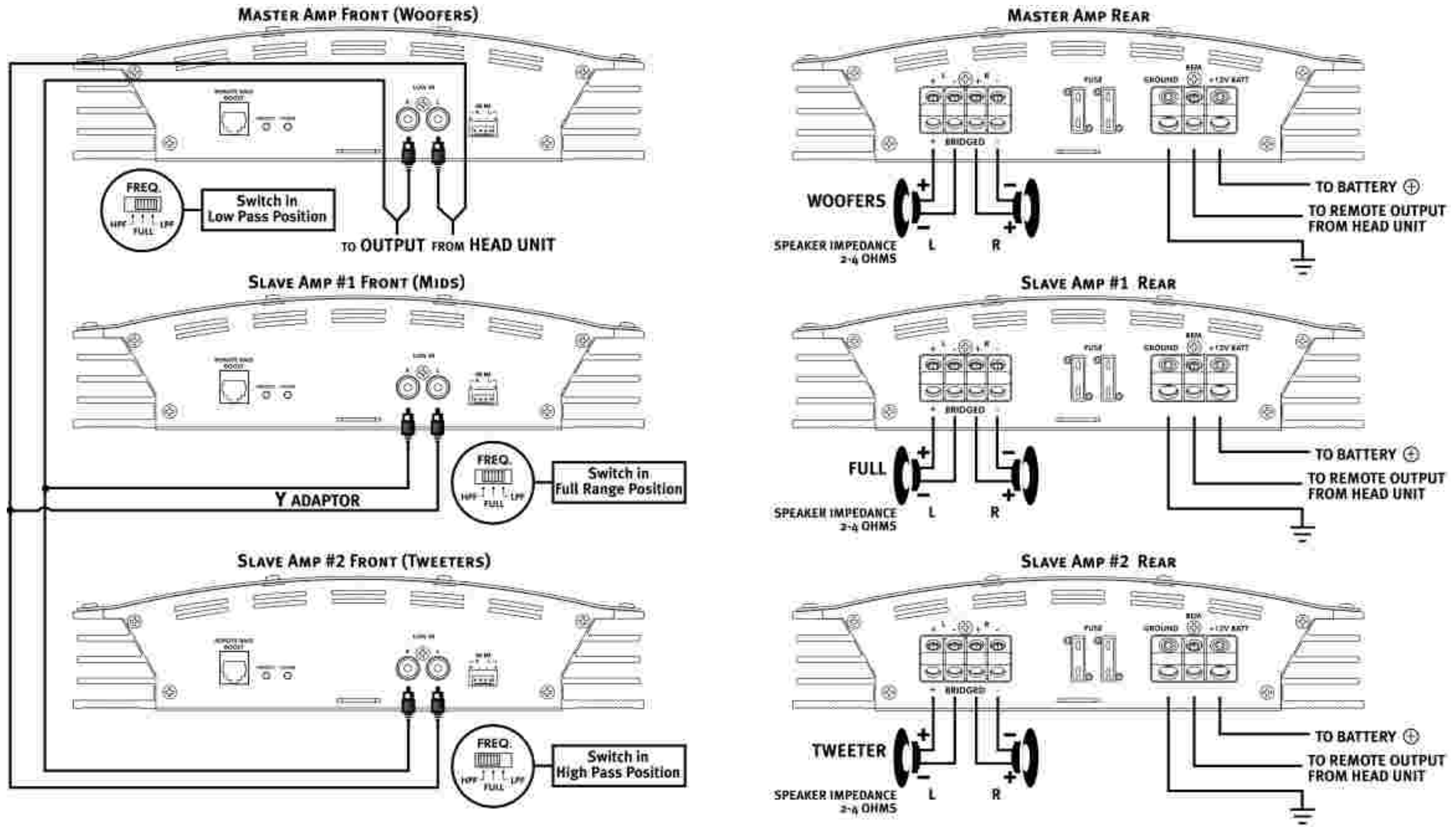
FRONT

REAR



TRIAMP SYSTEM USING THREE 2 CHANNEL AMPLIFIERS

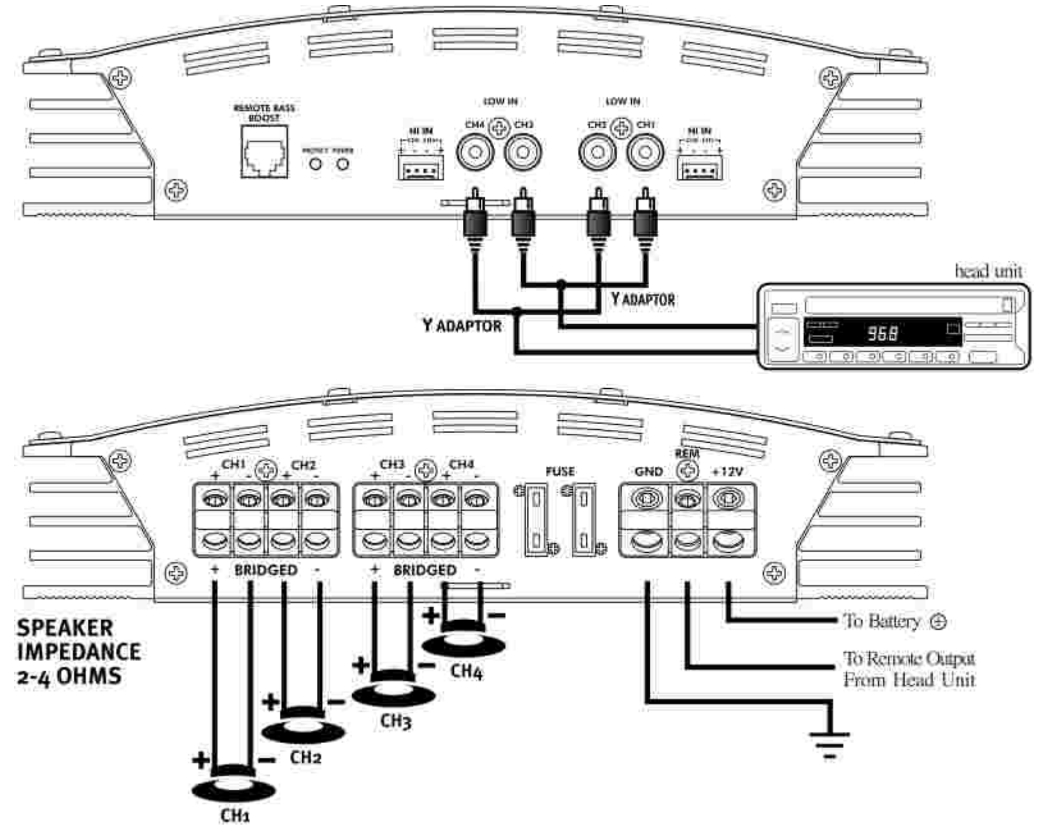
MXA 232/242/252/282



System Wiring
4 CHANNEL STEREO CONFIGURATION

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REAR

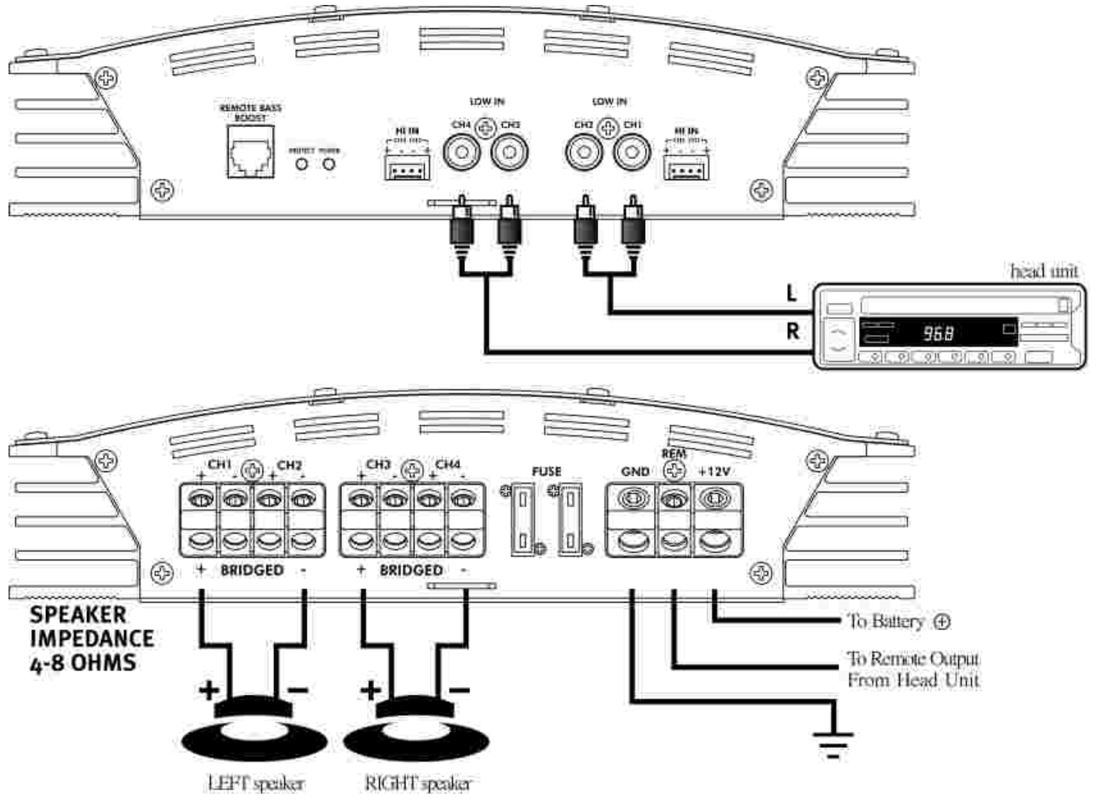


MXA 412/422

System Wiring
4 CHANNEL BRIDGED MODE CONFIGURATION

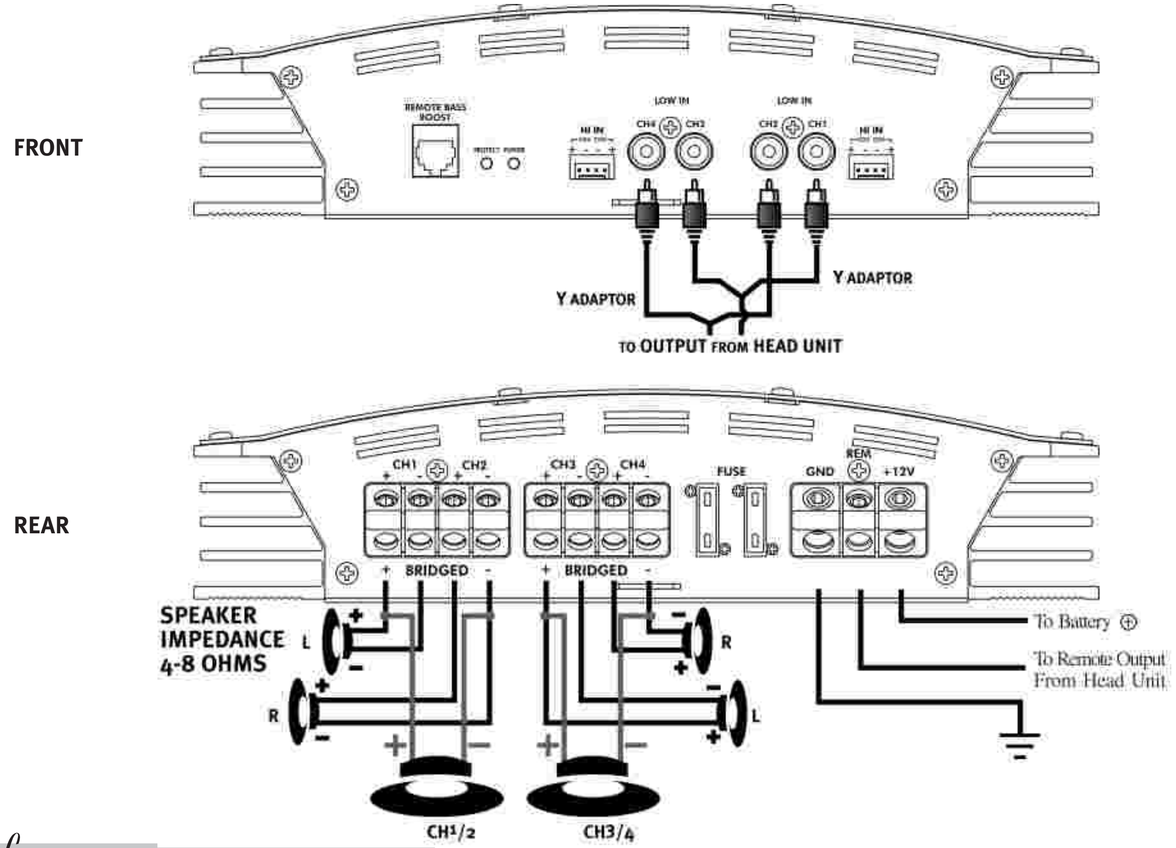
FRONT

REAR



4 CHANNEL TRI-MODE CONFIGURATION

VIBE 412/422



- Before you drill or cut any holes, investigate your car's layout very carefully. Take care when your work near the gas tank, fuel lines, hydraulic lines and electrical wiring.

- Do not operate the amplifier when it is unmounted. Attach all audio system components securely within the automobile to prevent damage, especially in an accident.

- Do not mount this amplifier so that the wire connection, or likely to be damaged by nearby objects. Be sure to select a location inside your vehicle which has adequate ventilation.

- Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals.

- If you need to replace the power fuse, only replace it with a fuse indentical to that supplied with the system. Using a fuse of a different type or rating may result in damage to your system which isn't covered by the manufacturer's warranty.

Amplifier Will Not Power Up.

- Check for good ground connection.
- Check that remote DC terminal has at least 12V DC.
- Check that there is battery power on the "+" terminal.
- Check all fuses.
- Check that Protection LED is not lit. If it is lit, shut off amplifier briefly and then repower it.

HIGH HISS OR ENGINE NOISE (ALTERNATOR WHINE) IN SPEAKERS.
• Disconnect all RCA inputs to the amplifier(s)-if hiss/noise disappears, then plug in the component driving the amplifier and unplug its inputs. If hiss/noise disappears, go on until the faulty/noisy component is found.

• It is best to set the amplifier's input level as low as possible. The best subjective S/N ratio is obtainable this way. Try to drive as high a signal level from the head unit as possible.

PROTECTION LED COMES ON WHEN THE AMPLIFIER IS POWERED UP
• Check for shorts on speaker leads.
• Check that the volume control on the head unit is turned down low.
• Remove speaker leads, and reset the amplifier. If the Protection LED still comes on, then the amplifier is faulty.

AMPLIFIER(S) GETS VERY HOT
• Check that the minimum speaker impedance for that model is correct.
• Check for speaker shorts.
• Check that there is good airflow around the amplifier. In some appliciations, an external cooling fan may be required.

DISTORTED SOUND
• Check that the level control(s) is set to match the signal level of the head unit.
• Check that all crossover frequencies have been properly set.
• Check for shorts on the speaker leads.

HIGH SQUEAL NOISE FROM SPEAKERS
• This is almost always caused by a poorly-grounded RCA patch cord.

